Oregon **Grade 5**

FlyBy Math™ Alignment to
Mathematics Grade-Level Standards
Adopted April 2002

Statistics and Probability

Common Curriculum Goal (CCG): Collect and Display Data:
Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.

Grade-Level Standards	***FlyBy Math*™ Activities**
M.05.2.C.1(3) Represent and interpret data using tables, circle graphs, bar graphs, and line graphs or plots (first quadrant).	--Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs. --Use tables, bar graphs, line graphs, equations, and a Cartesian coordinate system to draw conclusions.
M.05.2.C.1(4) Compare different representations of the same data and evaluate how well each representation shows important aspects of the data (e.g., circle and bar graphs, histograms with different widths).	--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.

Algebraic Relationships

CCG: Patterns and Functions:
Understand patterns, relations, and functions.

Grade-Level Standards	***FlyBy Math*™ Activities**
M.05.3.A.1(1) Represent and analyze patterns and functions using words, table, graphs or simple algebraic expressions.	--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system. --Use tables, bar graphs, line graphs, equations, and a Cartesian coordinate system to draw conclusions.

CCG: Algebraic Relationships:
Represent and analyze mathematical situations and structures using algebraic symbols.

Grade-Level Standards	***FlyBy Math*™ Activities**
M.05.3.B.1(4) Identify and represent whole number data on a coordinate graph (first quadrant).	--Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.

CCG: Modeling:
Use mathematical models to represent and understand quantitative relationships.

Grade-Level Standards	***FlyBy Math*™ Activities**
M.05.3.C.1(1) Identify or describe a situation which may be modeled by a given graph.	--Use tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.

CCG: Change: Analyze change in various contexts.	
Grade-Level Standards	***FlyBy Math™* Activities**
M.05.3.D.1(1) Identify and describe situations with constant or varying rates of change and compare them.	--Use graphs to compare airspace scenarios for both the same and different starting conditions and the same and different constant (fixed) rates.

Geometry

CCG: Coordinate Geometry: Specify locations and describe spatial relationships using coordinate geometry and other representational systems.	
Grade-Level Standards	***FlyBy Math™* Activities**
M.05.5.C.1(1) Make and use coordinate systems to specify location and describe paths.	--Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.

Mathematical Problem Solving

CCG: Conceptual Understanding: Select, apply, and translate among mathematical representations to solve problems.	
Grade-Level Standards	***FlyBy Math™* Activities**
M.05.6.A.1(1) Interpret the concepts of a problem-solving task and translate them into mathematics.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
CCG: Processes and Strategies: Apply and adapt a variety of appropriate strategies to solve problems.	
Grade-Level Standards	***FlyBy Math™* Activities**
M.05.6.B.1(1) Choose strategies that can work and then carry out the strategies chosen.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
CCG: Communication: Communicate mathematical thinking coherently and clearly. Use the language of mathematics to express mathematical ideas precisely.	
Grade-Level Standards	***FlyBy Math™* Activities**
M.05.6.D.1(1) Use pictures, symbols, and/or vocabulary to convey the path to the identified solution.	--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.
CCG: Accuracy: Accurately solve problems that arise in mathematics and other contexts.	
Grade-Level Standards	***FlyBy Math™* Activities**
M.05.6.E.1(1) Accurately solve problems using mathematics.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.